

IN THE CLAIMS

No claims are amended. The claims are reproduced herein for the Examiner's convenience:

1. (PREVIOUSLY PRESENTED) An apparatus for trimming the mass properties of a spacecraft, comprising:

a storage spool mounted on the spacecraft;

an output spool mounted on the spacecraft; and

a flexible material having a first end coupled to the storage spool and a second end coupled to the output spool;

wherein a length of the flexible material is distributed between windings of the storage spool and the output spool to adjust mass properties of the spacecraft.

2. (ORIGINAL) The apparatus of claim 1, wherein the flexible material has a direct path between storage spool and the output spool.

3. (ORIGINAL) The apparatus of claim 1, wherein the flexible material has an indirect path between storage spool and the output spool.

4. (ORIGINAL) The apparatus of claim 3, wherein the indirect path is formed by one or more guides.

5. (ORIGINAL) The apparatus of claim 1, wherein one or more guides support the flexible material.

6. (ORIGINAL) The apparatus of claim 1, wherein the storage spool is spring loaded to wind the flexible material onto the storage spool.

7. (ORIGINAL) The apparatus of claim 1, further comprising one or more latches to prevent the flexible material from disengaging the storage spool or the output spool.

8. (ORIGINAL) The apparatus of claim 1, wherein the flexible material comprises a metal ribbon.

9. (ORIGINAL) The apparatus of claim 8, wherein the metal ribbon comprises a spring, the spring loaded to wind onto the storage spool.

10. (ORIGINAL) The apparatus of claim 1, wherein the flexible material comprises a wire.

11. (ORIGINAL) The apparatus of claim 1, further comprising a motor assembly for winding the flexible material between the storage spool and the output spool.

12. (ORIGINAL) The apparatus of claim 11, wherein the motor assembly comprises a stepper motor.

13. (ORIGINAL) The apparatus of claim 11, wherein the motor assembly comprises a gearbox assembly.

14. (ORIGINAL) The apparatus of claim 11, wherein the storage spool is spring loaded to wind the flexible material onto the storage spool and the motor assembly is alternately controlled to allow the flexible material to wind onto the storage spool and to overcome the spring loading and wind the flexible material onto the output spool.

15. (ORIGINAL) The apparatus of claim 14, wherein the flexible material comprises a spring that spring loads the storage spool.

16. (PREVIOUSLY PRESENTED) A method for trimming the mass properties of a spacecraft, comprising the steps of:
providing a storage spool on the spacecraft;

providing an output spool on the spacecraft;
coupling a first end of a flexible material to the storage spool;
coupling a second end coupled of the flexible material to the output spool; and
distributing a length of the flexible material between windings of the storage spool and the
output spool to adjust mass properties of the spacecraft.

17. (ORIGINAL) The method of claim 16, wherein the flexible material has a direct path between storage spool and the output spool.

18. (ORIGINAL) The method of claim 16, wherein the flexible material has an indirect path between storage spool and the output spool.

19. (ORIGINAL). The method of claim 18, wherein the indirect path is formed by one or more guides.

20. (ORIGINAL) The method of claim 16, further comprising supporting the flexible material with one or more guides.

21. (ORIGINAL) The method of claim 16, wherein the storage spool is spring loaded to wind the flexible material onto the storage spool.

22. (ORIGINAL) The method of claim 16, wherein one or more latches prevent the flexible material from disengaging the storage spool or the output spool.

23. (ORIGINAL) The method of claim 16, wherein the flexible material comprises a metal ribbon.

24. (ORIGINAL) The method of claim 23, wherein the metal ribbon comprises a spring, the spring loaded to wind onto the storage spool.

25. (ORIGINAL) The method of claim 16, wherein the flexible material comprises a wire.

26. (ORIGINAL) The method of claim 16, further comprising a motor assembly for winding the flexible material between the storage spool and the output spool.

27. (ORIGINAL) The method of claim 26, wherein the motor assembly comprises a stepper motor.

28. (ORIGINAL) The method of claim 26, wherein the motor assembly comprises a gearhead assembly.

29. (ORIGINAL) The method of claim 26, wherein the storage spool is spring loaded to wind the flexible material onto the storage spool and the motor assembly is alternately controlled to allow the flexible material to wind onto the storage spool and to overcome the spring loading and wind the flexible material onto the output spool.

30. (ORIGINAL) The method of claim 29, wherein the flexible material comprises a spring that spring loads the storage spool.